

WE CLAIM

1. A print assembly for a wide format printer, the print assembly comprising an elongate carrier that is mountable on a support structure of the printer in an operative position with respect to a platen of the wide format printer;
a number of printhead chips positioned on the carrier, the printhead chips together incorporating at least fifty thousand nozzle arrangements, the printhead chips being positioned so that the printhead chips are capable of ejecting ink drops into a printing zone defined by the platen; and
10 control circuitry that is also positioned on the carrier and that is configured to control operation of the printhead chips.
2. A print assembly as claimed in claim 1, in which the printhead chips together incorporate at least one hundred thousand nozzle arrangements.
3. A print assembly as claimed in claim 2, in which the printhead chips together incorporate at least two hundred thousand nozzle arrangements.
4. A print assembly as claimed in claim 3, which includes between forty and one
20 hundred printhead chips positioned on the carrier.
5. A print assembly as claimed in claim 1, in which each printhead chip is the product of an integrated circuit fabrication process.
6. A print assembly as claimed in claim 5, in which each printhead chip includes a wafer substrate and a CMOS drive circuitry layer positioned on the wafer substrate with the nozzle arrangements positioned on the wafer substrate and the CMOS drive circuitry layer.
7. A print assembly as claimed in claim 6, in which each nozzle arrangement is in the
30 form of a micro electro-mechanical system that is electrically connected to the CMOS drive circuitry layer.

8. A print assembly as claimed in claim 5, which includes a plurality of printhead modules, each printhead module incorporating a printhead chip, the printhead modules being mounted on the carrier.
9. A print assembly as claimed in claim 8, in which a flexible printed circuit board (PCB) is mounted on each printhead module and connected between the CMOS drive circuitry layer of each printhead chip and the control circuitry.
10. A print assembly as claimed in claim 8, in which the printhead modules are configured so that the printhead chips are each positioned at a common angle of greater than zero degrees and less than ninety degrees with respect to a line extending a length of the printing zone, so that consecutive printhead chips overlap at their ends.
11. A wide format printer that comprises
a support structure;
a print assembly positioned on the support structure, the print assembly comprising
a carrier that is mounted in an operative position with respect to a platen of the wide format printer;
a number of printhead chips positioned on the carrier, the printhead chips together incorporating at least fifty thousand nozzle arrangements, the printhead chips being positioned so that the printhead chips are capable of ejecting ink drops into a printing zone defined by the platen; and
control circuitry that is also positioned on the carrier and that is configured to control operation of the printhead chips; and
a media feed mechanism positioned on the support structure to feed media into the print assembly.